

## CLAIMS

1. Dispensing group for the preparation of a beverage from a soluble product, of the type comprising a collecting device having a seat suitable to receive a disposable cartridge containing the soluble product, said cartridge comprising at least one outlet opening for the delivery of a beverage consisting of said soluble product and a fluid, wherein said at least one outlet opening is defined by at least one breaking line present on a wall of said cartridge and wherein said collecting device comprises at least one piercing member to pierce said cartridge in correspondence to said breaking line and to completely engage said outlet opening thereby formed, characterised by comprising means of regulation of the delivery of said beverage in such a way that said soluble product is delivered for at least 75% of the total dispensing time.
2. A group according to Claim 1, wherein said means of regulation comprise at least one delivery port between the wall of said piercing member and the edge of said outlet opening, said port being absent before the beverage delivery phase and present during said phase.
3. A group according to Claim 1 or 2, wherein said at least one engagement portion of said piercing member is substantially cylindrical in shape with circular section and wherein said outlet opening is substantially circular in shape.
4. A group according to Claim 2 or 3, wherein the ratio  $R$  between the diameter  $D2$  of the engagement portion of said piercing member and the diameter  $D1$  of said outlet opening is  $1 \leq R \leq 1.067$ .
5. A group according to Claim 2 or 3, wherein the ratio  $R$  between the diameter  $D2$  of the engagement portion of said piercing member and the diameter  $D1$  of said outlet opening is  $1 \leq R \leq 1.04$ .
6. A group according to Claim 2 or 3, wherein the ratio  $R$  between

the diameter D2 of the engagement portion of said piercing member and the diameter D1 of said outlet opening is  $1 \leq R \leq 1.02$ .

7. A group according to Claim 2 or 3, wherein the ratio R between the diameter D2 of the portion of said engagement piercing member and the diameter D1 of said outlet opening is  $1 \leq R \leq 1.014$ .

8. A group according to Claim 1, wherein said means of regulation comprise one or more stop elements for limiting the deformation of a portion of the wall of said cartridge in proximity of said outlet opening.

9. A group according to Claim 8, wherein said one or more stop elements comprise one or more fins which support said piercing member.

10. A group according to Claim 8 or 9, wherein said one or more stop elements comprise at least one annular member having diameter greater than said outlet opening.

11. A group according to Claim 10, wherein said annular member has a surface portion tilted towards the base wall of said cartridge.

12. A group according to Claim 11, wherein said tilted surface portion has an inclination between  $0^\circ$  and  $45^\circ$  with respect to a horizontal plane supported on said annular member.

13. A group according to Claim 11, wherein said tilted surface portion has an inclination between  $15^\circ$  and  $35^\circ$  with respect to a horizontal plane supported on said annular member.

14. A group according to Claim 11, wherein said tilted surface portion has an inclination of  $30^\circ$  with respect to a horizontal plane supported on said annular member.

15. A group according to one of the preceding Claims, wherein said means of control of the deformation of the base wall are realised with a plastic material having visco-elastic deformation.

16. Method for the preparation of a beverage from a soluble product

contained in a disposable cartridge, wherein said cartridge is lodged in the seat of a collecting device having at least one piercing member in order to open an outlet opening from said cartridge, said opening being defined by at least one breaking line present on a wall of said cartridge and being completely engaged by the said piercing member after having formed said opening, and wherein entry of a fluid into said cartridge is provided for through an entry port of the same in order to obtain the dispensing of a beverage consisting of said soluble product and said fluid, characterised by providing regulation of the dispensing of said beverage so that said soluble product is delivered for at least 75% of the total dispensing time.

17. A method according to Claim 16, wherein the regulation of the dispensing is carried out by means of at least one delivery port between the wall of said piercing member and the edge of said outlet opening during the dispensing phase of the said beverage.

18. A method according to Claim 16 or 17, wherein at least said engagement portion of said piercing member is substantially cylindrical in shape with circular section and wherein said outlet is substantially circular in shape.

19. A method according to Claim 17 or 18, wherein the ratio  $R$  between the diameter  $D2$  of the engagement portion of said piercing member and the diameter  $D1$  of said outlet opening is  $1 \leq R \leq 1.067$ .

20. A method according to Claim 17 or 18, wherein the ratio  $R$  between the diameter  $D2$  of the engagement portion of said piercing member and the diameter  $D1$  of said outlet opening is  $1 \leq R \leq 1.04$ .

21. A method according to Claim 17 or 18, wherein the ratio  $R$  between the diameter  $D2$  of the engagement portion of said piercing member and the diameter  $D1$  of said outlet opening is  $1 \leq R \leq 1.02$ .

22. A method according to Claim 17 or 18, wherein the ratio  $R$

between the diameter D2 of the engagement portion of said piercing member and the diameter D1 of said outlet opening is  $1 \leq R \leq 1.014$ .

23. A method according to Claim 16, wherein regulation of dispensing is carried out by means of one or more stop elements in order to limit the deformation of a portion of wall of said cartridge in proximity of said outlet opening during said phase of beverage dispensing.

24. A method according to Claim 23, wherein said one or more stop elements comprise one or more support fins of said piercing member.

25. A method according to Claim 23 or 24, wherein said one or more stop elements comprise at least one annular member having diameter greater than said outlet opening.

26. A method according to Claim 25, wherein said annular member has a surface portion tilted towards the base wall of said cartridge.

27. A method according to Claim 26, wherein said tilted surface portion has an inclination between  $0^\circ$  and  $45^\circ$  with respect to a horizontal plane supported on said annular member.

28. A method according to Claim 26, wherein said tilted surface portion has an inclination between  $15^\circ$  and  $35^\circ$  with respect to a horizontal plane supported on said annular member.

29. A method according to Claim 26, wherein said tilted surface portion has an inclination of  $30^\circ$  with respect to a horizontal plane supported on said annular member.

30. A method according to one of Claims 16 to 29, characterised by controlling said deformation by means of the use of plastic material with visco-elastic deformation in at least part of the base wall of said cartridge.

31. Disposable cartridge for the preparation of a beverage from a soluble product in a group for beverage preparation according to any of Claims 1 to 15 or by performing a method according to any of Claims

16 to 30.